CYP2C9 variants linked to clinical events in VTE

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(HealthDay)—For elderly patients treated with vitamin K antagonists for

venous thromboembolism (VTE), *CYP2C9* variants are associated with any clinical event, according to a study published online Aug. 22 in the *Journal of Thrombosis and Haemostasis*.

Michael Nagler, M.D., from Bern University Hospital in Switzerland, and colleagues examined the correlation between *CYP2C9/VKORC1* variants and long-term clinical outcomes among 774 elderly patients treated with vitamin K antagonists for VTE.

Overall, 78 percent of the patients had a *CYP2C9* or *VKORC1* variant. The researchers found that 43.2 percent of patients had any clinical event, 15.4 percent died, 12.9 and 21.6 percent had major and non-major bleeding, respectively, and 12.9 percent had recurrent VTE. After adjustment there was a correlation for *CYP2C9* variants with any clinical event (hazard ratio, 1.34; 95 percent confidence interval, 1.08 to 1.66), death (hazard ratio, 1.74; 95 percent confidence interval, 1.19 to 2.52), and clinically relevant non-major bleeding (subhazard ratio, 1.39; 95 percent confidence interval, 1.02 to 1.89), but not with major bleeding (subhazard ratio, 1.03; 95 percent confidence interval, 0.69 to 1.55) or recurrent VTE (subhazard ratio, 0.95; 95 percent confidence interval, 0.62 to 1.44). Slightly lower anticoagulation quality was seen for patients with genetic variants.

"*CYP2C9* was associated with long-term overall mortality and non-major bleeding," the authors write. "While genetic variants were associated with a slightly lower anticoagulation quality, there was no relationship between genetic variants and major bleeding or VTE recurrence."

More information: Abstract
Full Text (subscription or payment may be required)